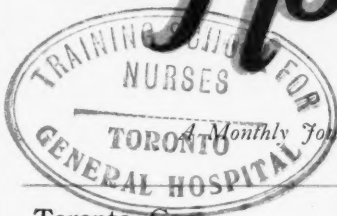
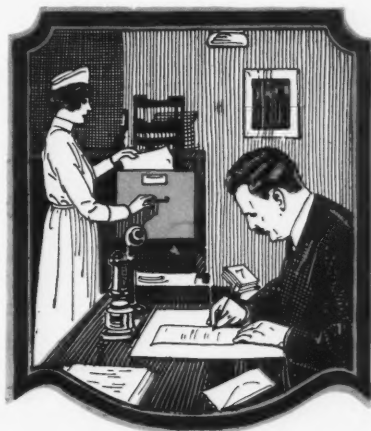


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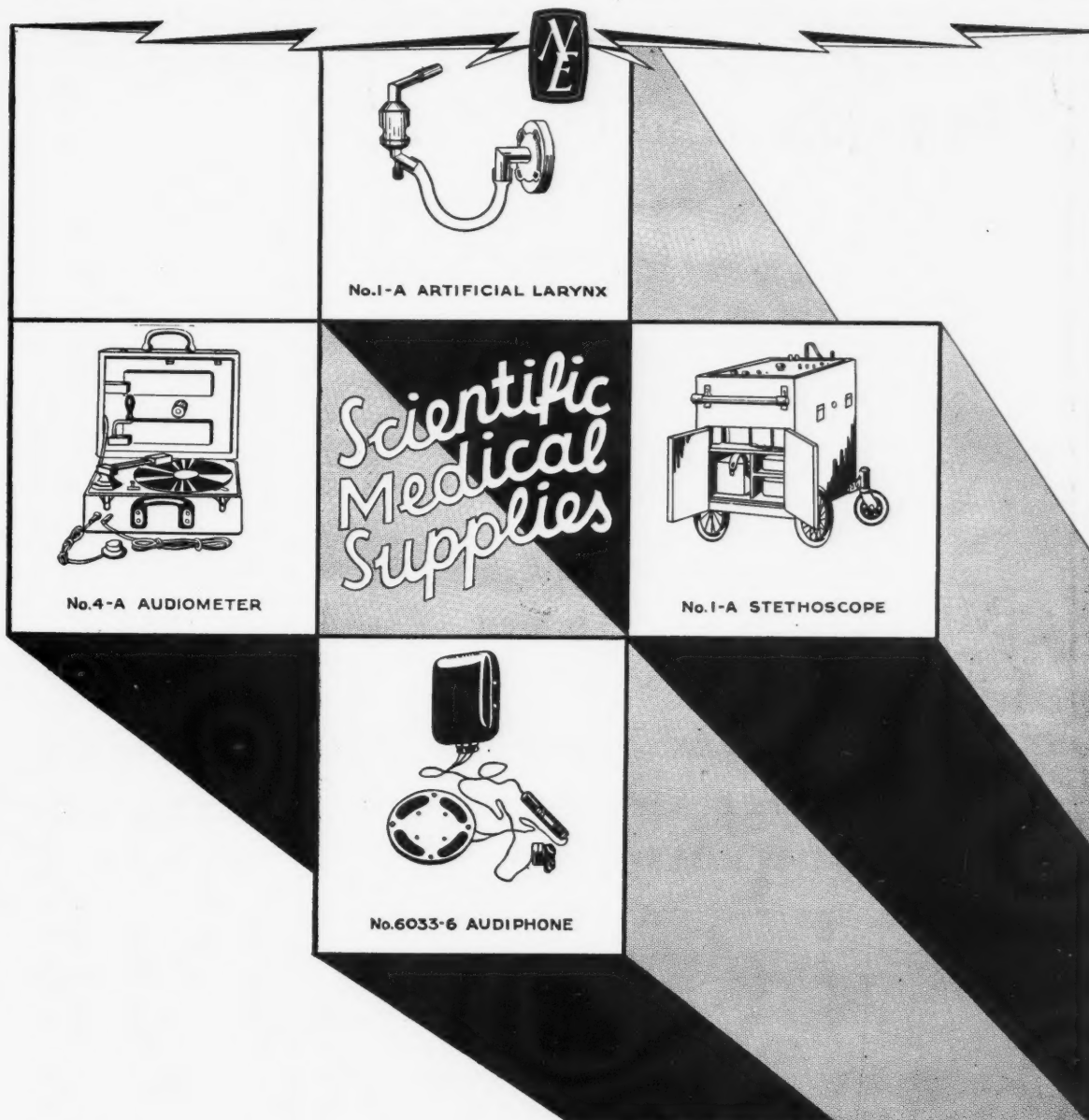
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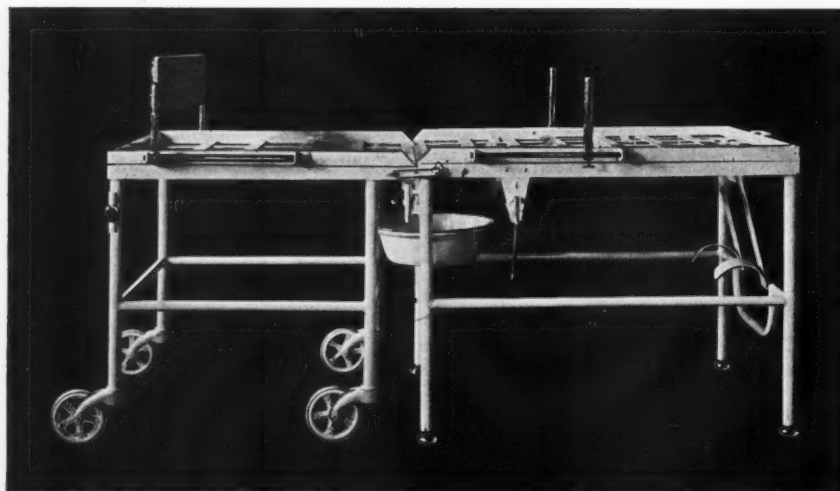
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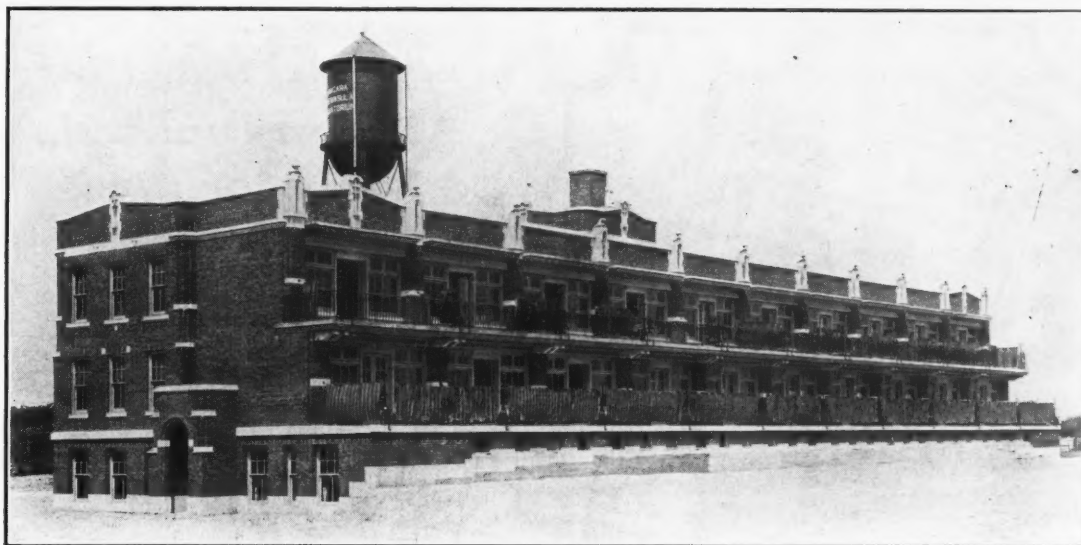
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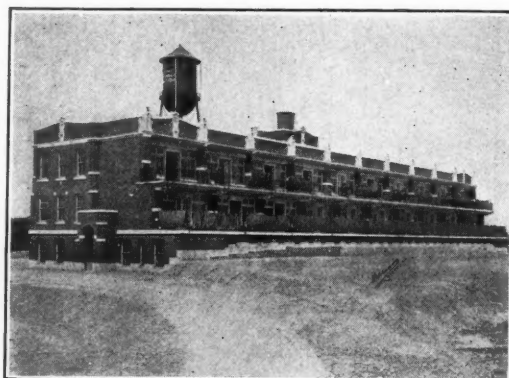


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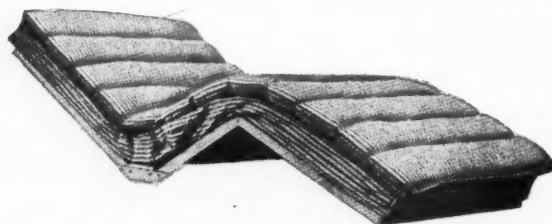
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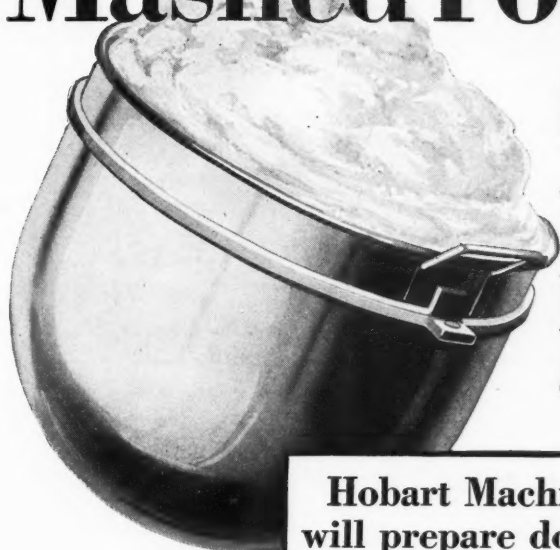
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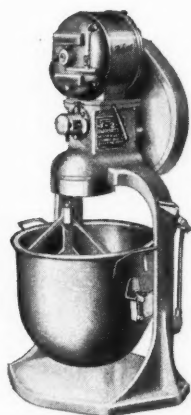


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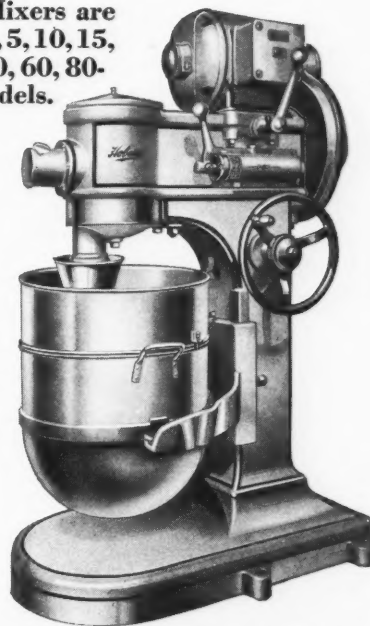
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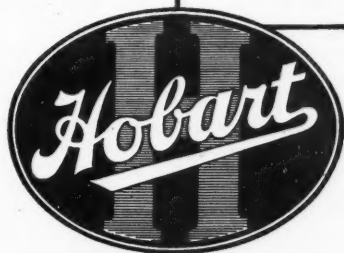


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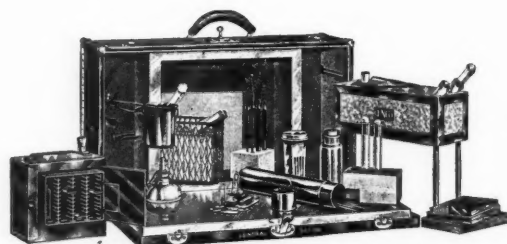
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Vol. 7.

JULY, 1930

No. 7.

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Mental Health Clinics to be Organized in Ontario

A NNOUNCEMENT was made a few weeks ago by Premier Ferguson that mental health clinics were to be opened shortly. A course of lectures on mental health during the latter days of May and the early days of June was given at the Ontario Hospital, Orillia, which was attended by a large group of members of Ontario hospitals throughout the province and others interested in the work. The course was to prepare the way for the work which the government will undertake throughout Ontario to alleviate the mental handicaps of children. Through the Public Health Departments the work of school nurses has improved the physical health of children, and it is the aim of the government to affect the same improvements in mental health.

This new phase of health work is receiving the personal attention of Premier Ferguson, who for some time has been vitally interested in similar work being done in Great Britain and the United States. The public have at last attained an understanding of preventive and palliative measures, in view of which fact it is thought that these clinics will be well received by the parents of children who do not make normal progress at school or who are difficult and obstreperous at home. The clinics will work in co-operation with all health organizations now existent.

In the larger cities, certain branches of this work are already well established and in Toronto there is a long waiting list for entrance to the auxiliary classes, in which special lines of study are followed. Dr. McGhie, superintendent of the Ontario Hospital at Orillia, has been chosen to organize and direct the work, and clinics are being arranged this summer in as many sections as possible. It is the intention of the government to locate these clinics throughout the province, which will be divided into districts. The clinic at Orillia will serve throughout Simcoe, Muskoka, Parry Sound and northern Ontario. Older Ontario will have clinics working from such centres as Toronto, Hamilton, London, Kingston, Brockville and other places which seem suitable.



Free Hospital Treatment Discussed in Saskatchewan

A S a preliminary step toward Health Insurance, free hospital treatment in the province of Saskatchewan was the suggestion of Alderman A. M. Eddy, the suggestion being embodied in resolution form and placed before the convention of urban municipalities held in Regina in June. It was pointed out that free hospital treatment would entail the taking over of hospital facilities by the provincial government. Provision is made, however, for those desiring private hospital treatment. On the other hand, those of moderate means who desire and require a standardized form of treatment would receive it at the expense of the government.

Attention was drawn to the seemingly satisfactory way in which this plan operates in some parts of the

Old Country. Although the cost to the government would admittedly be large, the cost would in fact be borne by the taxpayers, who would all be taxed alike, with unequal burdens on none. The next step, according to the formulator of the resolution, would be health insurance. Mr. Eddy cites the case of the Chinese, who believe in providing for sickness when they are well, rather than when they are sick. State medicine, with all the doctors under the direction of the government, would be the third step. It was stated that many doctors in the province of Saskatchewan were in favour of that plan.

As an indication of the difference of opinion which exists on the subject of health insurance and state medicine, we draw your attention to some of the remarks made by Dr. Willard C. Rappleye, of New Haven, Conn., Director of the Commission on Medical Education in the United States, at the Convention of the Ontario Medical Association. Dr. Rappleye laid particular stress upon the fact that any system of state medical treatment should be based on its medical rather than its political value, and pointed out that the English system brought in by David Lloyd George was draining the treasury of \$800,000,000 yearly. In connection with the widespread criticism of supposedly high sickness costs, Dr. Rappleye stated that in his opinion they were not as high as they were supposed to be.

Despite all that is heard of the high cost of illness, it was found that in the United States only 2.4 per cent. of the national income was spent on physicians' fees. Five and a half times as much is spent on non-essentials. Moreover, 50 per cent. of the patients treated in general hospitals never pay the physician, stated Dr. Rappleye. It is the contention of this student of the costs of sickness that there is no single solution for the lessening of the burden any more than there is any one cause. Dr. Rappleye pointed out that systems of health insurance have always existed, but the difficulty under these circumstances was the retention of the *quality* of medical service. Such quality is essential because of the impossibility of standardizing either the patient or the physician.

In the discussion which followed, it was pointed out that "providing cheaper treatment is entirely different from providing better and more accurate diagnosis", which is after all the prime requirement.



Chatham Hospital Believes in Cultural Pursuits for Its Nurses

SINCE the publication of an article entitled "Voice Culture and Choral Singing for Nurses in Training" in the May issue of the Canadian Hospital, we find that at least one other institution is doing something of a like nature for its nurses in training. In a letter from Miss Priscilla Campbell, Superintendent of the Public General Hospital, Chatham, Ont., we are advised that their Choral Society for Student Nurses was organized two years ago under the direction of Mr. Geo. B. Cummings, Director of Park Street United Church choir. The forty student nurses

at the hospital spend one evening of each week of the school term in choral singing and are said to both profit from and enjoy this interlude. The members of the Choral Society have become so proficient that this year they took full charge of the graduation musical programme.

Another cultural pursuit for the nurses in training is the Student Nurses Literary Club under the direction of Mr. Charles Beeston, an outstanding student of English, who is very much interested in the education of nurses. During the past term the students have made an intensive study of the life and works of Canadian authors, preparing an essay on each. Literature and the drama being so closely allied, the students have prepared and acted three plays with great success. Miss Campbell remarks as follows in her letter: "Our students have received a lot of pleasure and benefit from both their Choral Society and Literary Club and display quite an interest in each."

The Board of the Chatham Public General Hospital are to be commended upon making provision for the cultural development of their nurses in training. Besides graduating these young ladies with a profession, they have inculcated in their minds a love for the beautiful as expressed in literature, music and the drama, and in doing so have enriched their lives more than perhaps can be realized. The policy of this Board is very much to be recommended to others and we trust that there may come a day when all curricula of Training Schools for Nurses will include such worth while pursuits.

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The Editor takes this opportunity of expressing eagerness to co-operate in every way possible both with the Association and its individual members. News of general interest, papers prepared for conventions, bulletins, annual reports, etc., will be welcomed for publication.

New 80-Bed Niagara Peninsula Sanatorium, Serves Welland and Lincoln Counties

ONLY a short distance from St. Catharines and less than fifteen miles from Welland, the new Niagara Peninsula Sanatorium on the Merrittville Road, stands as a monument to an interested body of workers of Welland and Lincoln Counties. This 80-bed institution will replace the old St. Catharines Consumptive Sanatorium whose accommodation was only approximately 20 beds, and which has been operating under increasing difficulties for some years. Lack of space has necessitated the treatment of tuberculosis patients in the General Hospitals of Welland, St. Catharines and Niagara Falls and many more sufferers have been unable to receive hospital treatment of any kind. With the opening of the new Sanatorium on June 17th by the Hon. George S. Henry, patients from the St. Catharines Consumptive Sanatorium and the General Hospitals were moved into their new quarters, the balance of the institution's accommodation was taxed from the opening day, and the Sanatorium is now filled to capacity.

The inception of this work for tuberculosis sufferers in the Peninsula dates back some twenty-five years, when a public meeting followed by a public campaign for funds resulted in the establishment of the sanatorium at St. Catharines. This project was fostered and generously supported from the beginning by Colonel R. W. Leonard, one of St. Catharines' foremost and most respected citizens. Indeed, the original site and building was presented to the Board by this gentleman, who has since then been very closely associated with developments. Until forced through ill-health to forego active participation in this work, Colonel Leonard served as President of the Board of Directors for sixteen years. Faced with the necessity for retirement, Colonel Leonard graciously offered to endow an improved and enlarged sanatorium, and the present magnificent enterprise, which the Editor had the privilege of inspecting previous to the preparation of this article, is the result of his vision and generosity. As a result of the initial campaign, the St. Catharines Consumptive Sanatorium was established in September, 1908, and the old frame residence, in use until now, was opened. Six and a half years ago, the work of the Mountain Sanatorium at Hamilton was extended and clinics were established at St. Catharines and elsewhere in the Niagara Peninsula. It was the clinics which demonstrated the necessity for a new and larger Sanatorium to cope with the tuberculosis found in the Peninsula.

For the past three years a full-time specialist, Dr. C. G. Shaver, has been holding clinics in St. Catharines, Niagara Falls, Welland and Port Colborne, twenty clinics in all being held every month. The cost of these

Every Facility for the Care and Treatment of Tuberculosis Patients Has been Provided in This Well Planned Institution.

clinics has been met by the respective Boards of Health. Dr. Shaver is the superintendent for the new Niagara Peninsula Sanatorium, dividing his time between the clinics in the centres mentioned and the Sanatorium.

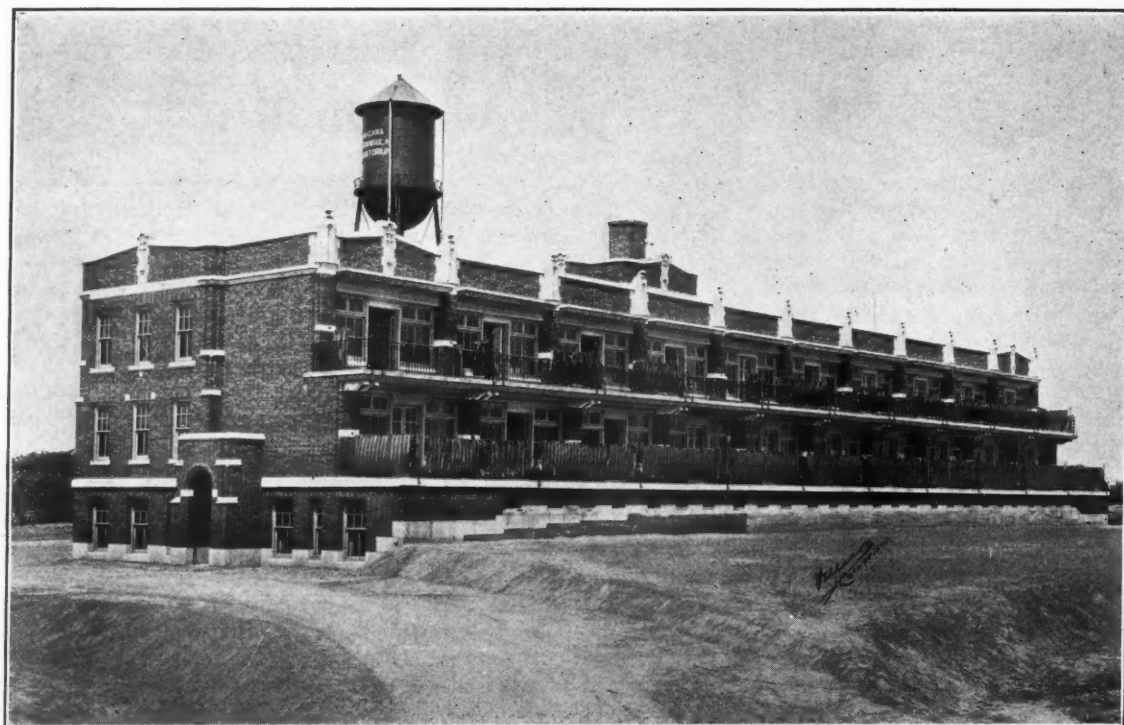
The nucleus of the fund for the new Sanatorium was the generous gift of Colonel Leonard in the amount of \$100,000. A public subscription followed, and the neighboring municipalities in Welland and Lincoln Counties have proved their generous spirit by making substantial grants.

Altogether expenditures and commitments to the amount of \$275,000 have been made by the Board, all but some \$55,000 of that amount being subscribed. It is expected that the Ontario Government will make a generous grant which will substantially reduce this deficit.

The Board of Directors of the Niagara Peninsula Sanatorium include the following: Colonel R. W. Leonard, Hon. J. D. Chaplin, Mr. A. H. Trapnell, Mr. A. W. Marquis, K.C., Mrs. Thos. A. Nicholson, Mr. Arthur Robinson, Mr. C. G. McGhie, Mr. A. F. Fifield, Mr. A. C. Kingstone, K.C., Dr. D. V. Currey and the Secretary, Mr. A. H. Collins.

After ways and means of financing had been discussed in detail, Mr. A. H. Trapnell, Chairman of the Building Committee, was appointed to find a suitable site. For some time the old sanatorium site was under consideration, but this was finally decided upon as unsuitable. The site finally chosen on the Merrittville Road, a paved highway connecting Welland and St. Catharines, is ideal. It is on a height of land which affords a commanding view of the surrounding countryside. The landscape is a varied one, comprising as it does wooded land, farm country, fruit orchards and the many communities which form the Niagara Peninsula. The Niagara escarpment forms the background for the institution.

The original site comprised 7 acres, but it was found necessary to purchase another 1½ acres, which together with the land bought for the sewage disposal plant makes the institution the possessor of some 17 acres. This is thought to be adequate for the expansion plans, which at present include a Nurses' Home and eventually a Preventorium. It will therefore be seen that the present building is only one unit in a definitely promulgated scheme which will be put into effect within a short time. The Nurses' Home will be built this Fall, and tenders are to be called for shortly. The Home will be 35 by 70 feet, two storeys in height and of fireproof construction, similar to the hospital. The cost will be in the neighborhood of \$35,000. The building will provide accommodation for the nursing



Niagara Peninsula Sanatorium, St. Catharines, Ont. The balcony arrangement is very inviting. From the north is an inspiring view of the beautiful country lying between the escarpment and Lake Ontario.

staff and office and apartments for the assistant medical superintendent who will eventually be necessary to assist Dr. Shaver.

The main building of the institution is located approximately 200 feet in from the east side of the highway connecting Welland and St. Catharines. It is on the brow of the escarpment and runs at right angles with the highway, facing south and commanding a view of the whole Niagara Peninsula to the south. Its height makes possible a glimpse of some of Toronto's tallest buildings on a clear day. Its position makes it unusually suitable for the treatment of tuberculosis patients, while its beautiful natural surroundings will contribute in no small way to the cheerful mental attitude of its occupants.

In size, the building is approximately 60 by 205 feet, with basement, first and second floor. The basement floor level is only approximately 2 feet below the grade line, therefore it receives an abundance of natural daylight. The three floors are laid out similarly in that a main corridor runs through the centre of the building from the east to the west side, with the general entrance on the west side and service entrance on the east side. There are separate entrances provided for the boiler room, kitchen and morgue, all located near the centre of the building on the north side. The route to the morgue is such that patients will not be aware of the arrival or departure of the undertaker. The parking area is also at the rear of the Sanatorium.

The main entrance from the west side of the basement runs through the lobby and vestibule into the main corridor, on the left of which is situated the Doctor's consulting room and the main cross hall with stairway to the upper floors. Adjacent to the stair-

way is the well equipped laboratory. On the right side near the entrance is located the general office, fully equipped, the reception room, etc. Further down the corridor is the X-Ray suite consisting of waiting room, reading room, transformer room, dressing room, a separate room for the controls and dark room. The X-ray equipment is thoroughly up-to-date and adequate for X-ray work in all positions.

Near the centre of the building on the right side is the store room for dry storage supplies, with employees' recreation room on the east side near the service entry. From the west side entrance on the left side, adjoining the cross hall stairway is located the lobby, from which entrance is made to the dispensary, the operating room, combined washup and sterilizing room and lavatories. The operating room is also entered from the main corridor, direct from the elevator, and is supplied with an abundance of natural daylight.

On the north side, near the centre of the building, there is located a furnace room which contains boilers, pumps and general heating and steam generating apparatus for cooking, heating and sterilizing in the basement floor and on the floors above. In the rear of the building on the north side and adjoining the boiler room is provided underground 2-car capacity coal storage, loaded from the top without shovelling. In the centre of the building on the north side is a 2-ton electric automatic control elevator entered from main corridors on all three floors. The elevator is equipped with devices for perfect operation and full protection and safeguarding of passengers. The kitchen is located on the east side of the elevator in a convenient location for the transportation of food from the main

kitchen to the ward kitchens on each floor. The kitchen may be entered from the main corridor or from a rear outside entrance and the adjacent storerooms.

The kitchen is equipped with the very latest and best quality of cooking appliances, using steam, coal and electric types, and automatic machinery for the cleaning and preparation of food is also installed. The kitchen is ventilated by a specially designed system of vent ducts and electric exhaust fans arranged to take away all steam and odours through registers. A very complete system of refrigeration has been installed with all refrigeration machinery located in a specially designed room adjoining the boiler room, and operates to provide refrigeration in two separate cold storage rooms opening into the kitchen, the laboratory and the diet kitchens on the upper floors. Staff and helps' dining rooms are located at the east end of the corridor.

All rooms in the basement have ample light and ventilation. The stairs throughout are constructed of steel with asphalt treads and hardwood handrail. All rooms and corridors in the basement have vitro tile dados 5 feet high. All floors are of terrazzo except the kitchen and cold storage room. The kitchen has red quarry finish and the cold storage rooms vitreous tile.

The first and second floors are arranged with wards, corridors and service rooms, practically identical. A main corridor extends the full length of the building with 9 wards of 4 beds each, 2 single wards and 2 wards of 2 beds each, all located on the south side of

the building. The rooms have full glass fronts, consisting of swing doors, transoms and disappearing window sash that is readily pushed down. When desirable the rooms are completely open, or the beds may be moved out to the open verandah for sun treatments. Each ward opens to a continuous balcony surrounded with ornamental iron railings, and divided into sections with canvas awnings.

The east end of the main corridor with additional room on the north side is arranged for a sitting room with wood and tile floors and ample window space. On the north side of the corridor are 2 main stairways near each end, an examining room, 2 isolation wards of 2-bed capacity each, 2 utility rooms, nurses' station, treatment room, linen rooms, 2 general toilet, bath and wash rooms with locker rooms adjoining, diet kitchen and elevator.

All floors throughout, except those in the sitting room, are of terrazzo. Walls, except those in the wards are of vitro tile. Ward walls have tile base, with upper walls and ceilings of enamelled plaster in varied colors. Woodwork is of selected birch in mahogany finish. Doors, lockers and general woodwork are of slab design and no woodwork extends less than 6 inches above the floors. Suitable utility rooms are provided on each floor. The building is also provided with the latest equipment for cleaning and maintenance. Every bed is provided with plugs for radio reception, phone, signal lights and electric plug service for bed warmers, fans and wall lights. The building is also equipped with transformer room and complete electric power control room in the basement.

The water supply is brought from the St. Catharines reservoir through underground piping to an elevated tank of 75,000 gallon capacity on a tower which is visible for some miles. The water is delivered by duplex automatic electric pumps, automatically controlled. The water pressure is sufficient to provide both for the water supply and fire protection.

The sewage and drainage is the most approved for rural sections and is handled by specially constructed septic tanks, settling wells and filters. The disposal of sewage proved a very perplexing problem until the Board decided to purchase about seven acres of land on the opposite side of the Merrittville Road, running from the top of the escarpment to the foot of the mountain. The septic tanks for sewage disposal are located half way down the escarpment, and the entire seven acres are enclosed by interwoven wire fences and cut off from all access. Connections from the Sanatorium are made through 10-inch sewer, laid for a distance of approximately 800 feet. The natural surroundings of the institution may therefore be recognized as ideal in more ways than one, and the Sanatorium has a sewage disposal system that leaves nothing to be desired for efficiency of operation.

All laundry work is provided for in a separate building about 200 feet distant from the Sanatorium. It lies to the north-east of the main building and is constructed of solid brick with reinforced concrete floors, gravel roof and walls similar to the Sanatorium proper. The building is approximately 42 by 55 feet and is two storeys in height. The ground floor is laid out



DR. C. G. SHAVER
Medical Superintendent, Niagara Peninsula
Sanatorium.



A four-bed ward, private room and recreation room in the Niagara Peninsula Sanatorium. Note the pleasing vista in the upper illustration. A radio, with loud speaker, is a feature of the well appointed sitting rooms.

for a laundry and equipped with washer, mangle, extractor, hand press, tumbler and other necessary machinery. At the right and left of the main entrance to the laundry, there are two small doors, one leading to quarters for the male help on the upper floor, the other to the boiler room. Each male member of the staff has an individual room, and in addition there is a general sitting room and a small, but well equipped kitchen. The boiler room is equipped with high pressure boiler and automatic coal stoker, with ample coal storage bunkers adjoining, and in the rear of the boiler room a three-car garage is provided which receives the benefit of heat in the winter months. The boiler room is fireproof throughout. The laundry boiler develops high pressure steam for all laundry work, and in addition provision is made for supplying steam for cooking and sterilizing during the summer months, so that the hospital heating system may be discontinued entirely. The hospital uses pulverized coal, which is fed to the boilers by a blower arrangement.

The color scheme throughout the hospital is in the main a combination of warm buff shades. Overhead lighting units are used in the corridors and in the administration section; wards, laboratory and certain other departments substituting wall brackets for overhead units. The drug room is lined from ceiling to floor with built-in cabinets and supply drawers. The operating room on the basement floor is flanked with full length windows through which an abundance of natural light enters. All X-ray films are stored in steel cabinets to conform to fire prevention regulations.

An excellent radio has been installed, with loud speakers in all sitting rooms for patients and staff, and ear phones at every bed. The sitting rooms are furnished with gayly upholstered wicker furniture, lovely, soft rugs, tall standards of ferns, reading lamps and well filled bookcases. Floors are of hardwood. The windows provide a far-reaching view of the Niagara Peninsula. The dining rooms for both the nursing staff and help are also well furnished with walnut furniture, rugs and a few easy chairs. Well chosen pictures are hung on the walls, and the curtains echo the general colour scheme.

All ward furniture has been donated by service clubs, fraternal and religious organizations. Women's Institutes, Hospital Aids and other interested bodies. Other generous gifts include the kitchen equipment from the Lions Club and the piano from the Rotary Club of St. Catharines. All equipment donated to the hospital bears a brass name plate acknowledging the donor or donors. The color schemes differ from one ward to the next, buff, peach and pale green predominating. Blankets in the wards for men are tan, and in the wards for women a warm rose shade. Floors throughout the wards are of copper stripped terrazzo. Beds are all equipped with overbed tables, and bedside tables and chairs constitute the balance of the ward furniture. Some of the beds are gatch type with adjustable overbed tables. All are equipped with casters and bumper wheels.

All patients are furnished with a locker equipped with rod for clothes hangers, sections for brush and comb and toilet accessories as well as other personal

effects. The outside of every locker has a mirror and shelf for personal toilet articles. Locker rooms are arranged in units of 10, and for every 20 lockers there are washrooms adjoining equipped with 2 baths, wash-basins, dental bowl and lavatories. The dental room is situated behind the nurses' station and record room. The diet kitchens have steam tables to which food containers are transferred on arrival from the kitchen. Trays are set up in the diet kitchen and delivered from there to the patients on that floor.

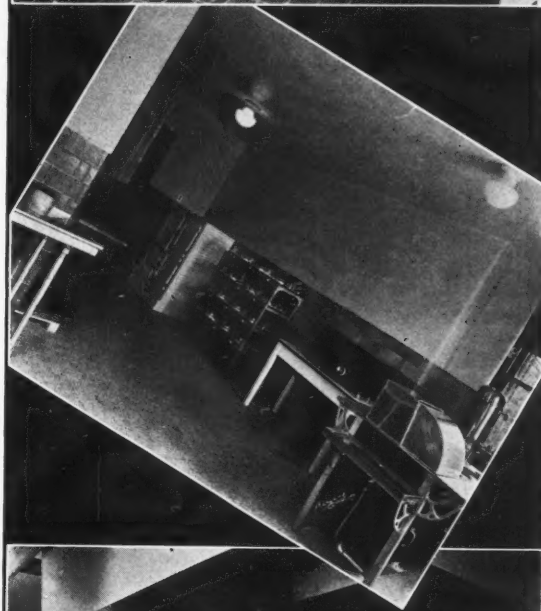
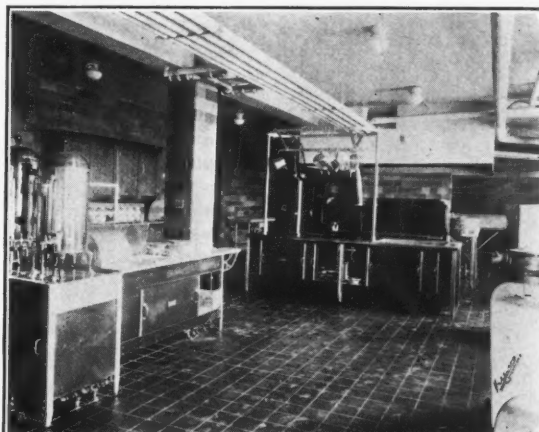
The morgue is equipped for post mortems and the exit is out of sight of the patients' verandahs. All food storage rooms and refrigerator equipment is easily accessible from the kitchen. This important department of the hospital has all the labor and time saving equipment money can buy including bake ovens, electric toasters, soup and porridge kettles, automatic dish washer and food mixer, potato peeler, steam tables, etc.

The building is fireproof throughout. The grounds are now being graded and sodded, walks are being laid, trees, shrubs and flowers will be planted, and by next spring the hospital grounds will present a very attractive appearance.

The Sanatorium is staffed by both graduate and undergraduate nurses. Miss Buss, the superintendent at the St. Catharines Tuberculosis Sanatorium which will now be closed, is superintendent of nurses at the new institution. There are two floor nurses who are graduates, 2 undergraduate nurses from the St. Catharines General Hospital and one undergraduate nurse from both the Niagara Falls General Hospital and the Welland County General Hospital. Every nurse in training at the St. Catharines General Hospital will spend two months at the Sanatorium. The medical superintendent is Dr. C. G. Shaver, a graduate of the University of Toronto.

The associated architects who are responsible for this thoroughly modern type of sanatorium construction are W. P. Witton of Hamilton and Thomas G. Wiley of St. Catharines. The general contractor was Wm. H. Cooper.

Sub-contractors were as follows: John Peart, St. Catharines, plumbing and heating; Alec Hawley, St. Catharines, electric wiring; W. D. Robertson, St. Catharines, lathing and plastering; Brown Jarvis Roofing Company, Brantford and St. Catharines, roofing and metal work; Kent Tiles and Marbles Ltd., Hamilton, tile and terrazzo floors and marble work; Standard Steel Construction Company, Welland, structural steel; Otis Fensom Elevator Company, Toronto, elevators; Norge Electric Company, Toronto, refrigeration; Dominion Awning and Weatherstrip Company, Niagara Falls, screens; McNamara & Reynolds, St. Catharines, interior wall and ceiling decoration; Rutherford & Ure, Engineers and Surveyors of St. Catharines, Sewage disposal and road building; Wrought Iron Range Company, Toronto, supplied all kitchen cooking equipment and food conveyors; Canadian Laundry Machinery Company, Toronto, installed all laundry equipment; Automatic Stoker Supply Company, Hamilton, furnace stoker.



Two views of the main kitchen and one of the diet kitchens in the Niagara Peninsula Sanatorium. The most efficient cooking and baking equipment has been installed in the spacious, well designed kitchen.

Banting Institute of Medicine will Perpetuate Discoverer of Insulin

It is very regrettable but nevertheless true that the names of great men are often forgotten even though their work should live on, or, what is even more regrettable, that their achievements should be minimized. Considering the frequency with which this occurs, it is very gratifying to find that the University of Toronto will perpetuate the name of the discoverer of insulin by associating his name with the new pathological building on College Street, Toronto. His discovery of insulin as a remedy for diabetes has brought renown to the institution which is his Alma Mater, who in her turn, now makes display of her gratitude in a fitting manner.

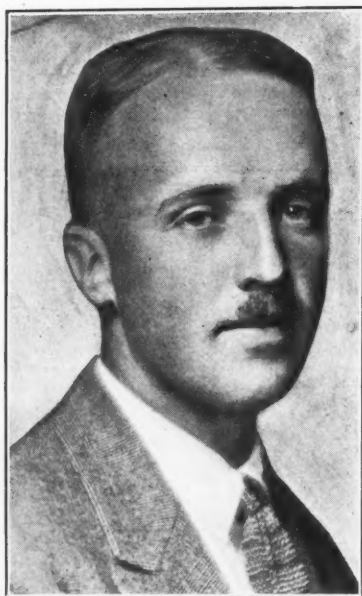
It is now more than ten years since Dr. Banting conceived the idea which led to the development of one of the greatest discoveries since the days of Pasteur, and since then its use has spread to every corner of the earth. The Banting Institute of Medicine will preserve in concrete form the name of the scientist whose discovery has proved of incalculable value to the human race, besides proving a source of inspiration to the students of medicine who will be trained within its walls, and to the investigators who will carry out research from year to year. True, every investigator will not prove another Dr. Banting, but their work will tend to widen the development of scientific knowledge.

The decade of insulin will be marked in Toronto on



DR. F. G. BANTING

world renowned for his discovery of Insulin, whose name will be perpetuated in the Banting Institute of Medicine, Toronto.

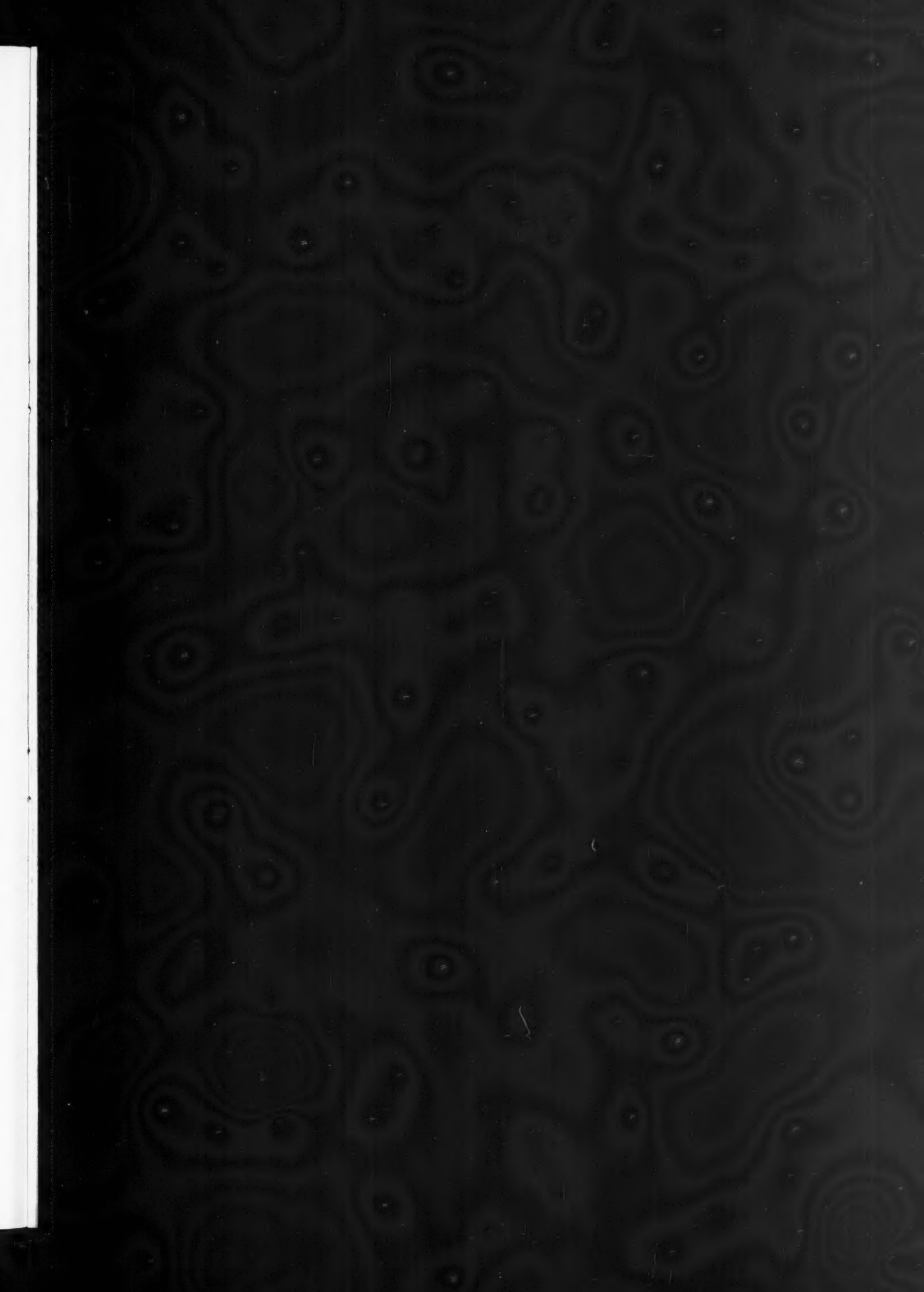


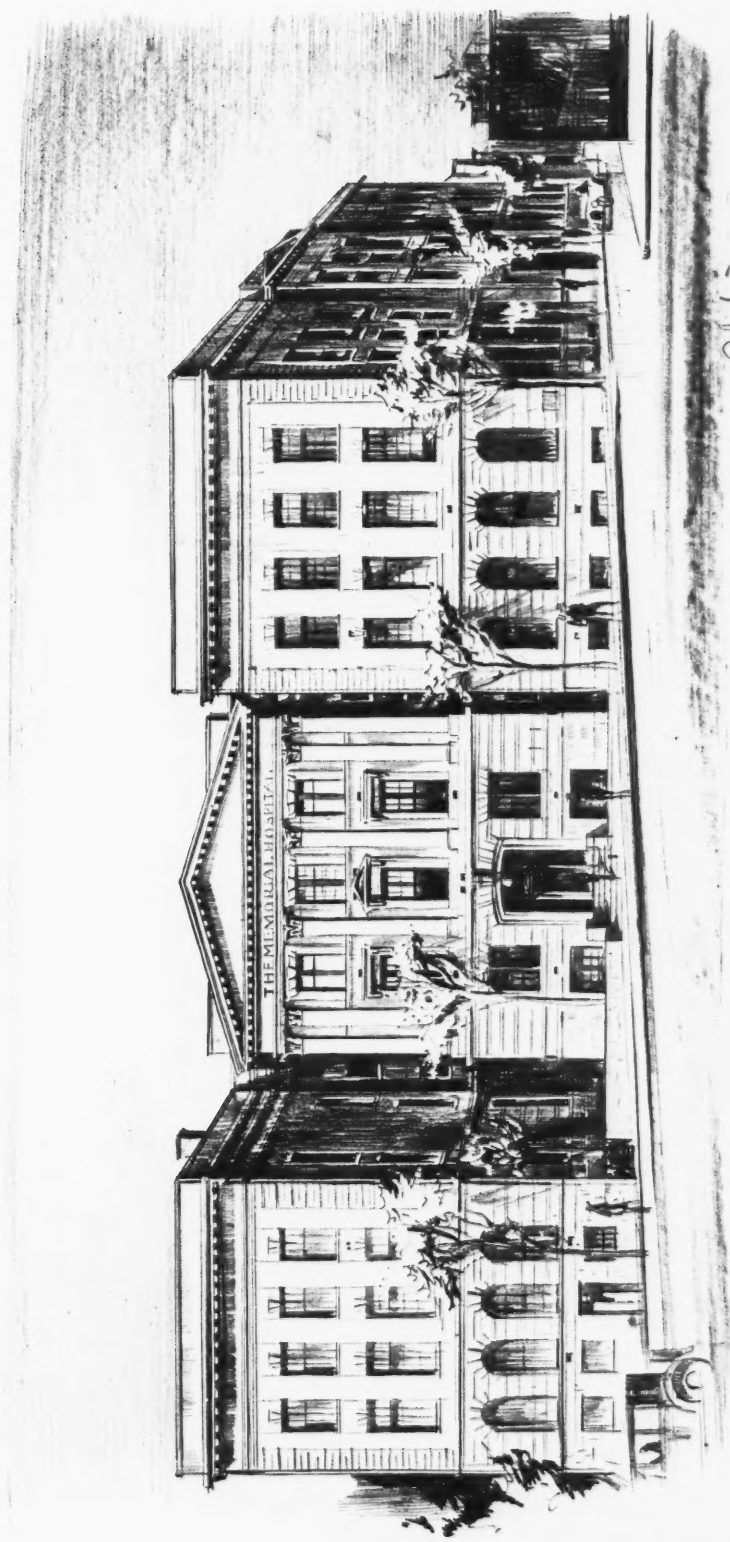
DR. CHARLES BEST

co-discoverer of Insulin with Dr. Banting, in whose honour the Banting and Best Chair of Medical Research is named.

September 16th and 17th by the opening of the new Banting Institute of Medicine, it was announced at the annual banquet of the Medical Alumni of the University of Toronto. Lord Moynihan, president of the Royal College of Surgeons, will officially open the new building. An effort will be made to have the opening of the institute the occasion of a great celebration. The Board of Governors of the University stand ready to supply the necessary funds and it is hoped that medical graduates will foregather from all parts of the world, testifying again to the enviable position of Toronto as a medical and scientific centre.

It was at the banquet that the first definite statement was made that the building under construction for use as a pathological unit would be named after the great scientist. It will be remembered that the old pathological building on University Avenue, adjacent to the Toronto General Hospital was taken over by that institution at the close of the University year for use as an X-Ray and out-patient department, this making necessary the construction of a new building on College Street. This new building is connected with the Toronto General Hospital, with which it will work in close conjunction. It will house in addition to the Banting and Best chair of medical research, the departments of pathology and bacteriology, pathological chemistry, clinical medicine and clinical surgery. It will also contain laboratory research facilities for practically all branches of medicine.





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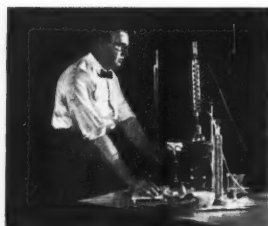


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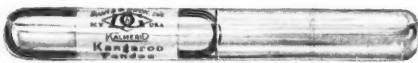
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Each tube contains one tendon

Lengths vary from 12 to 20 inches

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460..BLACK TWISTED SILK....	60.....	000, 0, 2
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822..20-DAY KALMERID "	20..00, 0, 1, 2, 3	
862..HORSEHAIR	56.....	00
872..WHITE SILKWORM GUT...	28.....	0
882..WHITE TWISTED SILK....	20.....	000, 0, 2
892..UMBILICAL TAPE.....	24...1/8-IN. WIDE	

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914..10-DAY KALMERID "	20..00, 0, 1, 2, 3	
924..20-DAY KALMERID "	20..00, 0, 1, 2, 3	
964..HORSEHAIR.....	56.....	00
974..WHITE SILKWORM GUT...	28.....	0
984..WHITE TWISTED SILK....	20.....	000, 0, 2

BOILABLE

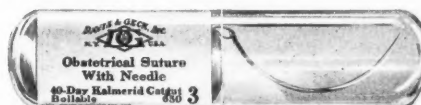
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All sutures are gauged by the standard catgut sizes as here shown

000	4
00	6
0	8
1	16
2	24
3	

*These tubes not only may be boiled but even may be autoclaved up to 30 pounds pressure, any number of times, without impairment of the sutures.

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HIERONYMUS BRUNSCHWIG (circa 1450-1533) was author of *Das Buch der Chirurgia*, the first surgical work printed in the German language. This book, published some twenty years before the birth of Paré, gives an accurate description of hemostasis by ligation, with recommendation for its use whenever feasible. The button suture, with so called surgeon's knot; the sutura circumflexa, for hare-lip; and the glover's suture, for intestine and omentum, are also described.

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Smaller Hospitals will Benefit Through Further Tariff Modifications

Our readers will perhaps recall that a footnote to the article entitled "Further Tariff Exemptions Will Benefit Hospitals" which appeared in the June issue of the Canadian Hospital, suggested that further exemptions and modifications might result from recent interviews with the Advisory Board on Tariff and Taxation. At the time of writing we were not aware of the form these would take or to what extent they would be applicable, but we suspected that the smaller hospitals were to be given further consideration.

This proved to be so, for in a recent communication from Dr. G. Harvey Agnew, Secretary, Department of Hospital Service, Canadian Medical Association, we learn that with respect to changes in the Tariff exemptions affecting hospitals, the last clause of Items 476a and 476b have been further modified to read:—

"... for the use of any public hospital, under regulations prescribed by the Minister."

This has been done to avoid the difficulties which were bound to arise from the interpretations of the clause suggested:—

"... when imported in good faith for the use and by the order of any public hospital."

The Canadian Medical Association discussed this point with the government after Mr. Dunning had made his budget speech in the House, and it is felt that the consent of the Minister and the Advisory Board on Tariff and Taxation to revise the suggested wording of these new items will make it much easier for the smaller hospital to take advantage of these exemptions, because so many institutions buy imported equipment from stock held by supply houses in Canada.

Advise Simplification of Hospital-Cotton Textiles

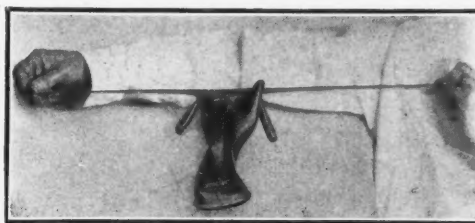
The following bulletin received from the Division of Simplified Practice of the Bureau of Standards, the Department of Commerce of the United States, government should be of interest to hospital readers:

"At the regular revision meeting of the Standing Committee on the simplification of Hospital and Institutional Cotton Textiles, recently held, it was unanimously decided to modify simplified practise recommendation as originally adopted and to submit the revised program to the industry for its consideration and approval, according to an announcement just made public by the Division of Simplified Practice of the Bureau of Standards, Dept. of Commerce. The outstanding changes recommended by the standing committee were the approval of the 108 inch torn length for sheets as standard and the adoption of hems 2 inches in depth for the top and bottom of such standard length sheets. The changes proposed, subject to the approval of the industry, are to become effective from July 1st, 1930."

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MONTREAL

A New Irradiated Biscuit, Containing Vitamins and Mineral Elements*

By Frederick F. Tisdall, M.D., T. G. H. Drake, M.B., Pearl Summerfeldt, M.B., and Alan Brown, M.B.,
Toronto, Ontario.

IN planning a diet it is necessary to have a knowledge not only of caloric requirements and the relative amounts of fats, carbohydrates, and proteins needed but it is also necessary to have a knowledge of the importance of vitamins and mineral elements in metabolism. Before discussing a food product in biscuit form which we have devised we will briefly consider the importance of the vitamins and mineral elements. Deficiencies in these substances are the faults most frequently encountered in our modern diets.

At the present time six separate and distinct vitamins are recognized, and without doubt more will be discovered in the future. The chemical composition of all is as yet unknown. A lack of vitamin A results in deficient growth and the development of xerophthalmia. In addition, this particular deficiency produces a definite alteration in the morphology and function of many of the mucous membranes. Vitamin B has been recently divided into two separate and distinct vitamins; B₁, a lack of which causes peripheral neuritis and poor growth and B₂, which is necessary for the prevention of pellagra and certain skin conditions. Vitamin B₂ is also necessary for normal growth. Vitamin C prevents scurvy. The antirachitic, or sunshine, vitamin D is necessary for the growth and repair of bone and other tissues. Vitamin E is essential for reproduction, and possibly certain other body changes at the age of puberty.

In addition to producing such definite clinical entities as rickets, tetany, scurvy, and the before mentioned conditions, an inadequate supply of vitamins results in a lowered resistance to infection.^{1 2 3 4} We realize that there are many other food factors which influence the resistance of the body cells against disease, such as proteins and mineral elements, but it is evident that a lack of vitamins over a long period may play an important role in the development of many of the chronic infective conditions encountered in children and adults.

In regard to degenerative changes it had long been thought that an excess of proteins tends to produce degeneration of the heart, kidneys, and other organs. This idea is now gradually being abandoned, as care-

Whole Wheat Biscuit Food Which Will Assist in the Repair and Growth of Body Cells and the Maintenance of Resistance Against Disease.

fully controlled observations have furnished no evidence in its favour. However degenerative changes do occur in animals fed diets deficient in vitamins, and these changes are sufficient to warrant the belief that an adequate supply of vitamins may be an important factor in the prevention of degenerative changes in human beings. Recent clinical observations lend weight to this belief. Fletcher and Graham⁵ have demonstrated the remarkable effect of wheat germ with its high vitamin content in the treatment of chronic

arthritis. Boyd, Drain and Nelson⁶ have shown the striking results of the administration of a combination of vitamins in the prevention of dental caries and other mouth conditions. Langstroth⁷ in a very general paper has advanced some evidence that a lack of vitamins may be associated with arthritis, hypertension, and other degenerative diseases. The importance of focal infections, however, in the production of degenerative diseases is well known, but, as animal experiments indicate that an inadequate supply of vitamins may be an important factor in the development of these foci of infection, we may conclude that many degenerative diseases may have their origin, either directly or indirectly, in an inadequate supply of vitamins.

It should be remembered that the requirements for vitamins and mineral elements vary greatly, larger amounts being necessary during childhood, and during pregnancy and lactation.

The importance of an adequate supply of the mineral elements, calcium and phosphorus, is universally recognized, particularly for the growth and repair of bone and teeth. Phosphorus is fairly widely distributed, being present in large quantities in meat, eggs, whole grains, milk, and some vegetables. The supply of calcium, however, is more limited, our chief sources being milk and leafy vegetables. McCollum and Simmonds,⁸ Sherman and Hawley,⁹ and others have shown that the average diet tends to be poor in calcium unless one to two pints of milk are included daily. Although it is obvious that growing children and pregnant or lactating women require large amounts of calcium, it is not so widely recognized that the average adult diet is low in this element unless care is taken to supply it.

Iron is an essential element of the haemoglobin of the blood and of the chromatin substances within the body cells. Egg yolk has the highest iron content of any food. It is also present in appreciable amounts in liver, lean beef, many fruits and vegetables, and whole

Continued on page 30

*From the Research Laboratories of the Hospital for Sick Children and the Sub-Department of Paediatrics, University of Toronto, under the direction of Alan Brown, M.B. Presented at the Academy of Medicine, Toronto, January 14, 1930. Reprinted from the Canadian Medical Association Journal.



Illustrated is Eaton's new bedside table as installed in the new Private Patients Pavilion, Toronto General Hospital.



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A New Irradiated Biscuit Containing Vitamins and Mineral Elements

Continued from page 28

grain products. Unfortunately, white flour and finely milled cereals contain very little of this element, as the greater part of the iron is in the discarded germ and bran. Milk contains very little iron. Sherman¹⁰ found that "the typical American dietary does not contain any such surplus of iron as would justify the practice of leaving the supply of this element to chance." It is therefore essential in planning a diet, particularly during infancy and pregnancy, to see that an adequate supply of iron is included.

As recently as one or two years ago it was thought that nine inorganic elements were all that were necessary for life. It can now be said that many others are required. One of the most important of these is copper, minute amounts of which are necessary for the formation of haemoglobin.

It is obvious that the correct method of planning a diet is first to incorporate in it the essential articles of food, and then to add the non-essential foods in order to cover the remaining caloric requirements. The chief essential foods are milk, meat, eggs, vegetables and fruit. In addition to fats and carbohydrates, these foods supply proteins, vitamins, mineral elements, and roughage. With the knowledge that the average diet, such as white flour, finely milled cereals, sugars, etc., contains an excess of the non-protective or vitamin-and mineral-lacking foods, and realizing the necessity of an adequate supply of these elements we have devised a food product in biscuit form which contains these necessary substances in appreciable quantities. Where the ordinary biscuit, zwiebach, rusk, toast or bread are all low in proteins, lacking in vitamins, and deficient in calcium, iron, and other salts, this biscuit contains in appreciable quantities most of the food elements necessary for the growth and repair of body cells and the maintenance of resistance against disease. The biscuit has as its basis whole wheat flour, irradiated wheat germ, milk, bone meal and iron. The whole wheat is in the form of a finely ground flour. The milk is added as a milk powder.

In regard to wheat germ, which constitutes 15 per cent. of the biscuit, it is well to mention here the place it occupies in the structure of a grain of wheat. Due to the present day desire for only finely milled products the germ is ordinarily discarded and not used for human consumption. The whole grain consists of three well defined structures, the bran, and endosperm, and the germ. The bran which constitutes about 13.5 per cent. of the wheat acts as a protective layer for the rest of the grain. It is comparatively rich in proteins, phosphates and vitamins. The endosperm which furnishes food for the germ during growth and makes up about 85 per cent. of the grain is the proportion which is utilized in the manufacture of white flour and finely milled cereals. It is very poor in mineral elements and is devoid of vitamins. The germ constitutes only about 1.5 per cent. of the grain and is the living part of the seed which grows and develops into the new plant. The germ contains about 8 per cent. fat and 30

per cent. protein. Its mineral content is about double that of the whole wheat flour and ten times that of white flour. It contains in appreciable quantities vitamins A, B₁, and B₂, and is the most concentrated source known of the reproductive vitamin E.

Before the wheat germ is used in the biscuit it is exposed to the rays from a mercury quartz lamp. As discovered by Steenbock¹¹, these rays activate the ergosterol normally present in the germ and thus produce the antirachitic, or sunshine, vitamin D. The whole

Continued on page 32

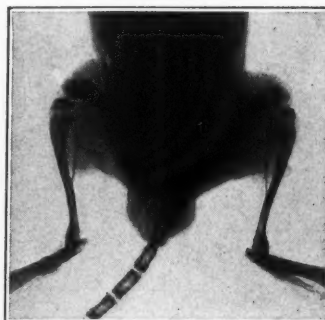


Fig. 1—Roentgenogram of rat fed on a rachitogenic diet + 25 per cent. non-irradiated biscuit. Blood phosphorus 1.1 mgm. per 100 c.c., and bone ash 37.2 per cent.

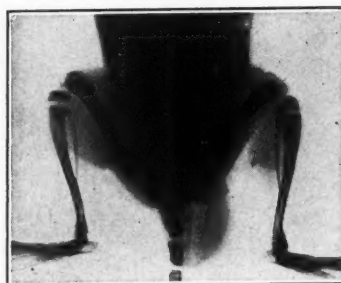


Fig. 2—Roentgenogram of rat fed on a rachitogenic diet + 25 per cent. irradiated biscuit cooked at 425° F. Blood phosphorus 2.4 mgm. per 100 c.c. and bone ash 37.8 per cent.

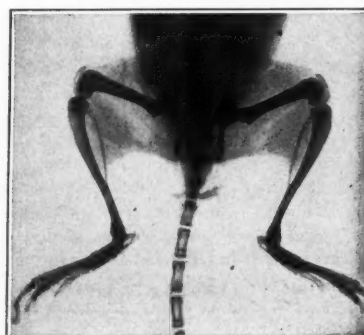
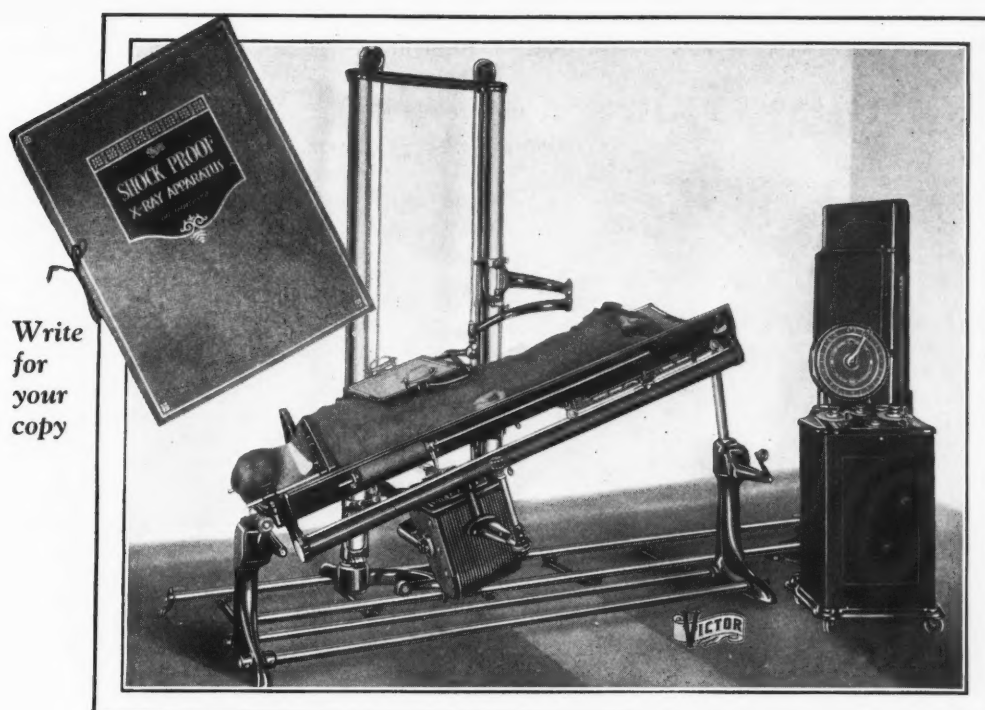


Fig. 3—Roentgenogram of rat fed on a rachitogenic diet + 25 per cent. irradiated biscuit cooked at 300° F. Blood phosphorus 3.0 mgm. per 100 c.c. and bone ash 48.7 per cent.



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A New Irradiated Biscuit Containing Vitamins and Mineral Elements

Continued from page 30

wheat flour and germ used in our product thus contains all the known vitamins with the exception of the anti-scorbutic vitamin C found in fresh orange juice. The vitamin content is further increased by the use of some butter and yeast. Butter supplies vitamin A in large quantities and yeast is a highly concentrated source of both vitamin B₁ and B₂. The yeast is not used as a leavening reagent but as a source of vitamins.

The bone meal is obtained by cooking bones in an autoclave at 267° F. for five hours. This removes all the fat. The bones are then ground and dried in an oven at 220° F. for twelve hours. The final product is an odourless and tasteless white powder. We are using this product in preference to the chemical substance calcium phosphate as there are traces of other mineral elements in the bone meal which may be of importance in the mineral metabolism of the body. The bone meal constitutes about 3 per cent. of the biscuit. This means that five to six biscuits have the calcium content of one pint of milk. The iron content is about 5 mgs. iron per 100 grams of biscuit as compared to about double this amount in egg yolk, our most concentrated source of iron in food. The iron is largely obtained from the wheat germ and whole wheat. Examination of the biscuit shows the presence of copper in the concentration of about 1 mg. per 100 grams of biscuit.

In studying the vitamin D content of the biscuit it was found that a considerable amount of the vitamin D present in the irradiated germ before cooking was destroyed when the biscuit was baked at 425° F. the temperature ordinarily used in baking biscuits. It is quite possible that if the amount of vitamin D produced by irradiation is markedly increased sufficient amounts for practical purposes may escape destruction at this temperature. After experimenting with different temperatures it was found that very little of the vita-

TABLE I
The Antirachitic Effect of Irradiation of Food and
Subsequent Cooking at Different Temperatures.

	Mgm. P. per 100 c.c. of blood	Percent- age of ash in bones
Rat on normal diet; age 8 weeks	6.3	57.0
Rat on Steenbock's rachitogenic diet	1.0	32.5
Rat on rachitogenic diet + 25 per cent. of non-irradiated biscuit*	1.1	39.0
Rat on rachitogenic diet + 25 per cent of irradiated biscuit cooked at 425° F.*	2.4	37.8
Rat on rachitogenic diet + 25 per cent of irradiated biscuit cooked at 300° F.*	3.0	48.7
Rat on rachitogenic diet + 25 per cent. of irradiated whole wheat and germ in proportions used in the biscuit, uncooked*	3.0	46.5
Maximum antirachitic effect possible with rats on rachitogenic diet with the use of ordinary therapeutic measures	4.5 (about)	54.0 (about)

*76 per cent. of the rachitogenic diet consists of yellow corn. The material to be tested was substituted for an equivalent amount of corn.

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min D was destroyed when the temperature of baking did not exceed 300° F. This is shown by the results in Table I and Figs. 1, 2 and 3. We estimate that the vitamin D content of ten to twelve biscuits is equal to that of one teaspoonful of standard cod liver oil.

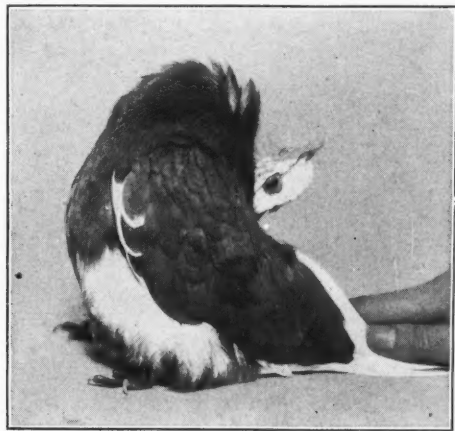


Fig. 4—Pigeon fed on a diet deficient in vitamins B₁ and B₂. After 4 weeks it developed polyneuritis, or beriberi, and died.

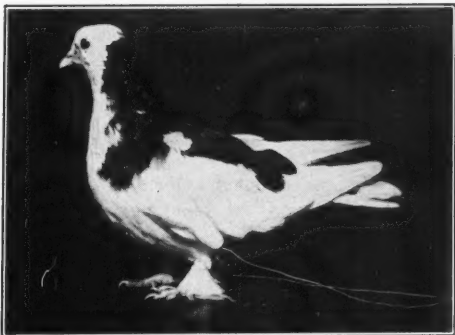


Fig. 5—Pigeon fed on a diet deficient in vitamins B₁ and B₂ with 15 per cent. of wheat germ added. The wheat germ was cooked at 300° F. for 20 minutes. After eight weeks on this diet the bird was apparently normal.

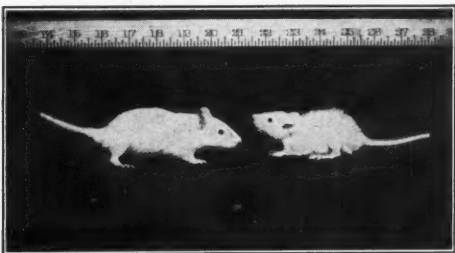


Fig. 6—Two rats fed on a diet deficient in vitamins B₁ and B₂. The larger rat received in addition 15 per cent. wheat germ cooked at 300° F. for 20 minutes.

Fig. 4 is that of a pigeon fed on a diet deficient in vitamin B₁ and B₂. After 4 weeks it developed polyneuritis, or beriberi, and died. Fig. 5 is that of another

Continued on page 41

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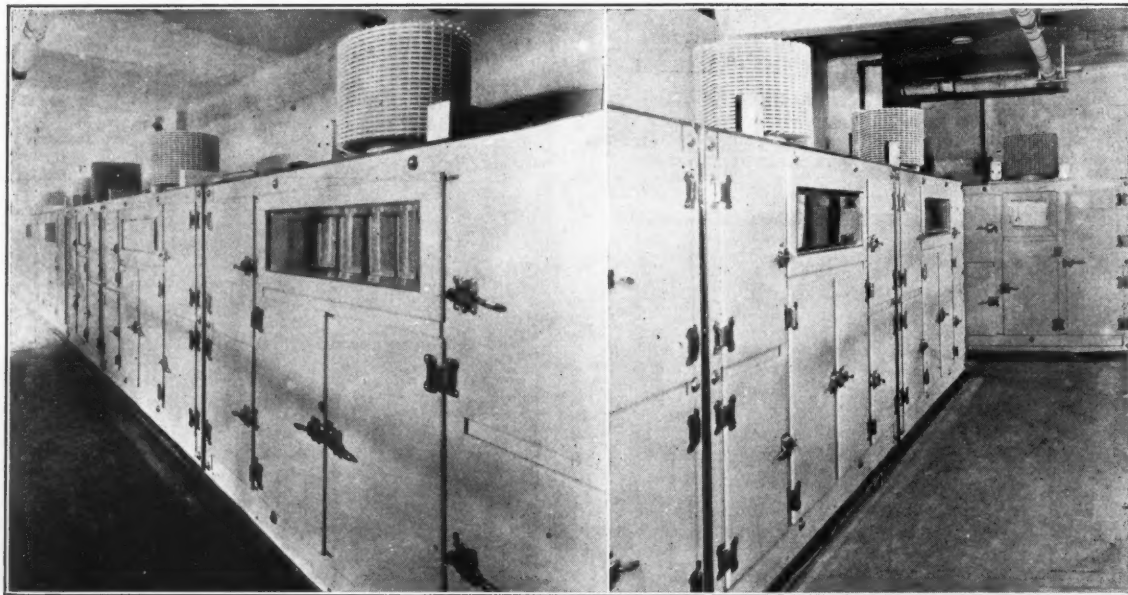
BUILDING to meet the continuous demands for increased accommodation, Laval Hospital at Ste. Foy, Quebec, will soon open a thoroughly modern and fireproof Sanatorium for 100 private patients and a Clinic for modern medical service with space for 100 more patients. These latest buildings to be added to the Laval Hospital, were begun in August, 1929, and are expected to be ready for occupation by July 1st, 1930, bringing the total capacity of the modern hospital up to 450 beds.

Away from the noise, smoke and dust of the city, the location of this hospital is ideal for the tubercular type of patient admitted there. Here in the well-equipped buildings the tuberculous patient can enjoy the ad-

vantages of exhilarating dry air, blue sky and bright sunshine with utmost comfort. Not the least essential to the welfare of the patient is the complete General Electric refrigerator installation in the kitchens.

Cold prepared foods, cold condensed soups, fresh fruits, greens and similar foods are essential to the kitchen preparations for the correct diet of tubercular patients. The refrigeration requirements of an institution, such as the Laval Hospital, demand the finest in continuous, efficient service and above all, absolute cleanliness and constant temperature.

The refrigeration equipment throughout the hospital is entirely General Electric and is the largest single commercial installation yet handled by the Canadian



Refrigeration installation in Laval Hospital, Quebec. Views taken from the centre, show cabinets designed for special purposes, providing correct temperatures for meats, milk, etc.

General Electric Company in Canada. The complete equipment consists of 1 special commercial G. E. Refrigerator having a capacity of 112 cubic feet; 1 special milk cabinet with a capacity of 140 cubic feet; 3 standard commercial G. E. Refrigerators with a capacity of 60 cubic feet each; 1 standard commercial refrigerator with a capacity of 45 cubic feet and one ice-cube making unit. The General Electric Refrigerators, each being completely self contained units, required little space. Their compact and neat arrangement can be seen from the illustrations.

Ten General Electric Refrigerators, Model G 55, have already been in use for over two years in different dietetic services in the hospital and, according to the Superieure of Laval Hospital, it was due to the excellent service and complete satisfaction rendered by these units that General Electric refrigeration was decided upon for the new additions to the hospital.

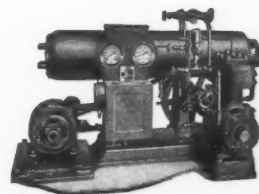
Laval Hospital was first opened in June, 1918, with a capacity of 125 beds. These were so quickly filled that the first building proved inadequate to the demands and another unit called the "Taschereau Building" was erected in 1924, bringing the total capacity of the hospital to 250 beds. Again the demands for accommodation grew so urgent that the directors authorized the present new units that will be most modern and up-to-date in every respect. The institution is incorporated and is under the charge of the Sisters of Charity of Quebec.

Enlargement of Western Hospital, Toronto, is Announced

Consideration of an early enlargement to the Western Hospital, Toronto, was announced by Alex Fasken, K.C., chairman of the Board of Governors, at the graduation exercises of Western and Grace Hospitals in Convocation Hall on June 3rd. It was pointed out that throughout the whole year just passed there had been more applications for admittance than the hospital had been able to cope with, and this presented a problem that the Board was forced to consider gravely. Plans for a large addition to the present building on Bathurst Street are under way in consequence, this addition to cope with the immediate needs of the institution. The current considerations include the abandonment of Grace Hospital on College Street, as has been the intention from the time of the union of the two hospitals and toward which they have been gradually working.

The new building will be designed to accommodate about 300 beds, which would include the 125 now at Grace, providing sufficient room to care for the present demands made upon the hospital. Architects and hospital experts are now working on the new plans, although it is not yet certain that there is adequate room on the Bathurst Street property.

This addition will not preclude proceeding with the plans for the new hospital when the funds are made available, it was also announced. Several sites have been under consideration and a suitable one has been found, but it can not as yet be purchased due to the lack of sufficient funds.



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News of Hospitals and Staffs

*A Condensed Monthly Summary of Hospital Activities,
and Personal News of Hospital Workers*

*Editor's Note: Contributions of items for publication in this department will be gladly received.
Please Address, The Canadian Hospital, 454 King Street West, Toronto.*

BURNS LAKE, B.C.—Tenders for the construction of a new cottage hospital at Burns Lake have been called for by the Hospital Society. The building, which was designed by architects of the Provincial Government, will be of frame construction on concrete foundations. It will be two storeys high and will provide accommodation for from 16 to 20 patients. The cost of construction is being borne by the Provincial Government, the Missionary Society of the United Church of Canada and the Burns Lake district.

* * *

CALGARY, ALTA.—A determined effort to clear the new Crippled Children's Hospital of the Red Cross Society of its debt of \$23,000 will be made immediately. Of this sum, almost half has already been promised, and a drive for the balance was inaugurated on June 2nd.

* * *

ESSONDALE, B.C.—Rapid progress is being made on the new \$700,000 veterans' wing and kitchen at the Mental Hospital. It is expected that the new building will be completed by November. Finishing touches are being put to the \$1,500,000 wing just erected. Plans for the veterans' unit call for a reinforced concrete structure five storeys high, including the attic. The central rib of the building will be 40 feet wide with bays at the front and rear. Stone, brick and terra cotta will be used to finish the exterior. The kitchen unit, set behind the veterans' building, will measure 165 feet by 50 feet and will be three storeys high. Service tunnels underground will connect with the main building. About \$6,000,000 have now been invested in the facilities and permanent structures at Essondale. Space has been staked at the site for future expansion to include another \$1,500,000 hospital unit, and eastern wing to the veterans' building and a new laundry and kitchen to be set behind the main buildings.

* * *

FORT SIMPSON, N.W.T.—Flames of unknown origin swept through the 20 year old Catholic Mission Hospital on June 4th, causing damage estimated at \$50,000. The heroic work of the Sisters saved the lives of the patients.

* * *

HAMILTON, ONT.—It has been decided by the Board of the Hamilton General Hospital to make further appeal to the city for an appropriation to provide increased accommodation at that institution. Figures show

that private patients have been refused admittance to the Mountain Hospital due to the lack of accommodation. Extensions to the east wings are suggested to alleviate this situation.

* * *

HAZELTON, B.C.—The hospital at Hazelton will soon be razed to make room for a new hospital building which will soon be constructed. The new building will have an increased capacity in keeping with the growth of the community it serves, and will probably house 50 beds. It will be built on the same site as the present institution.

* * *

KENTVILLE, N.S.—Dr. Ruben Schlossberg has resigned from the staff of the Kentville Sanatorium, his resignation taking effect June 20th. He leaves to take post graduate work in Chicago. During his two years at the sanatorium, Dr. Schlossberg has been one of the most popular members of the staff, who regret his departure exceedingly.

* * *

KITCHENER, ONT.—The new wing of the Freeport Sanatorium was opened by the Honorable Lincoln Goldie early in June.

* * *

LONDON, ONT.—Plans for the new wing of St. Joseph's Hospital to cost \$200,000, are under consideration. It is understood that the structure will be built on the east side of the hospital and will be four

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DR. WARD WOOLNER
of Ayr, Ont., newly elected President of the
Ontario Medical Association.

storeys in height. The need for further accommodation has been urgent for some time and the hospital authorities plan on commencing operations as soon as possible so that the work may be finished in the fall.

* * *

MIMICO, ONT.—The construction of a new Nurses' Home, costing \$70,000, and the reconstruction of the men's building for the Ontario Hospital, was recently announced. The new building will provide for 60 nurses and will result in a greater amount of available space in the main building where the nurses are now housed from necessity.

* * *

MONTREAL, QUE.—The new section for children in the Women's General Hospital was formally opened early in June. The new ward provides for 50 more children. Dr. M. Scherzer, chief of the Department of Paediatrics, will have charge of the new ward.

* * *

MONTREAL, QUE.—The corner of Cote de Neiges and Cote St. Catherine Rd. have been purchased by the Executive committee of the Jewish Hospital Fund as a site for that institution. The site possesses the useful features of centralization, accessibility and cleanliness of surroundings. The Jewish community of Montreal last autumn secured a sum of over a million dollars in the course of a week's campaign in the interests of a general hospital.

Continued on next page

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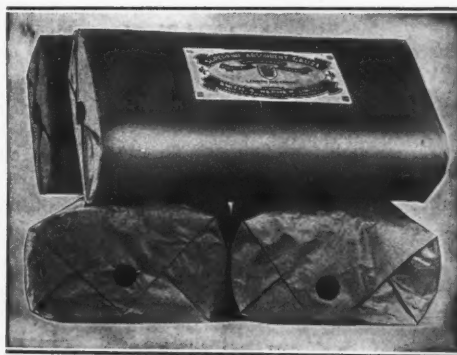
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The Niagara Peninsula Sanatorium at St. Catharines, Ont., has recognized the many benefits to be derived from the installation of Sanitary equipment.

Throughout all the washrooms of this Institution, you will find Sop-O-zoN individual Liquid Soap Dispensers, all finished in Chromium Nickel, and in connection with which they are using Lik-wiD Brand Mulso Liquid Toilet Soap—the finest hospital grade of coconut and olive oil soap ever produced.

For the reception of their used paper towels, they have purchased twenty Economy all-steel Waste Receptacles. When the rubbish is deposited in the receptacle, the door opens instantly and then when the hand is removed, it closes—TIGHT. Both sides of this receptacle can be used at the same time, as they operate independently of each other.

Naturally the executives of this Sanatorium are keenly interested in the preservation of their floors, so G. H. Wood & Company, Limited, offered to demonstrate to them Germax—The Antiseptic Super Liquid Floor Wax. The demonstration was, as usual, exceptionally satisfactory, so an order was placed covering their requirements, so when you inspect this very fine Institution we want you to particularly admire the finish of their floors.

In keeping with the other equipment in this splendid building, you will find quite a number of the new Cabinet Style Water Coolers also finished in hospital white. These Cabinet Coolers are of all-steel construction with a very heavy insulation of ground cork between the sides of the body. This, of course, assures the retention of the ice for the maximum period—and also a supply of cold water practically whenever required. On the right-hand side of the Cooler is affixed a clamp or bracket to which is attached a Burt Paper Cup Dispenser which delivers individually, as required, Burt Paper Cups, which are an ideal hospital drinking cup.

A great deal of the credit for the exceptionally satisfactory air condition in these washrooms, etc., must be given to the architects but, as we all know, odors will and do arise that must be destroyed. To counteract this situation, you will notice an unobtrusive, yet attractive Chromium Plated Fixture. This contains one Zef-ir Air Purifying Oriental Bouquet Bloc which is giving off invisible vapors which completely and pleasantly overcome all noxious odors.

The Executive of the Niagara Peninsula Sanatorium are indeed to be highly complimented on this very fine undertaking which meets the needs of this thriving district.

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TORONTO

OTTAWA

NINETTE, MAN.—The Ninette Sanatorium has been fortunate in receiving as an endowment gift 500 shares of the stock of the A. R. McNichol Company, valued at \$50,000 from Mr. A. R. McNichol, the president of the company. It has been the intention and wish of the board to create an endowment fund for some years, therefore this handsome sum constitutes a very substantial nest egg. Mr. McNichol is already well known for his generous gifts to the sanatorium.

* * *

OWEN SOUND, ONT.—A new telephone switchboard has been placed in operation at the Owen Sound General and Marine Hospital. The board is located in the business office and connects all floors and all departments of the hospital with one another and with the "outside". It is expected that many steps will be saved and the efficient operation of the hospital augmented by this convenience.

* * *

PETERBORO, ONT.—In regard to the proposed \$300,000 addition and improvements to the Nicholls Hospital, the Hospital Board and the City Council seem to have reached an understanding. It has been agreed that if the Council submits a by-law to provide the necessary funds to the Protestant ratepayers, the Hospital Board will apply to the Provincial Legislature to amend the Act of Incorporation of the hospital Trust. The change is sought to permit the Council to appoint as representatives on the Hospital Board the Mayor and several aldermen. It will be remembered that the by-law submitted in 1929 was defeated.

* * *

STE. AGATHE, QUEBEC.—The new Mount Sinai Sanatorium, equipped with 100 beds, will be opened some time during July, it is expected. The tubercular poor of the Jewish community will find greatly improved hospitalization facilities such as X-Ray, quartz lamps, sterilization rooms, dental department, vault for storing X-Ray films, radio connections in the wards, separate wards for incipient cases and for the very sick, a roof garden for sun baths, sun porches and a synagogue. It is also aimed to provide a dispensary for the use of residents of the surrounding district. The Provincial Government has contributed \$150,000 toward the building of the new sanatorium. An additional \$100,000 will be required for equipment and furnishings and will be raised among the members of the Jewish community. Dr. D. L. Mendel is the medical superintendent.

* * *

ST. BONIFACE, MAN.—More than three quarters of a million dollars in labour and materials will be expended this summer in the construction of the new St. Boniface Sanatorium, work on which has already commenced. The site of the sanatorium is in St. Vital, just north of the Agricultural College. The building will face the Tweed River on a well wooded lot. The group of buildings includes a large power house. The hospital itself is H-shaped, with overall dimensions of 230 x 240 feet, four storeys in height and will be built of reinforced concrete, tapestry brick and Tyndell stone. Accommodation for about 225 patients will be

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provided. The ground floor will be devoted to kitchens, dining rooms, occupational therapy rooms. On the first floor will be the administration section, chapel and two wings for patients. Second and third floors will be taken up with operating rooms, X-Ray department, eye, ear, nose and throat clinics, laboratories and dressing room. A children's department and accommodation for sun treatment will occupy the fourth floor.

* * *

ST. JOHN, N.B.—Dr. R. J. Collins succeeds Dr. H. A. Farris, who resigned from the staff of the St. John Tuberculosis Hospital on March 1st and who is now in Europe. Dr. Collins was a native of Ohio and received his training at the Western Reserve University, Cleveland. He was for a time at the sanatorium in Kentville, and relinquished duties there to become superintendent of the River Glade sanatorium in succession to Dr. Carmichael.

* * *

SASKATOON, SASK.—The roughly estimated cost of providing a new wing and a nurses' home for the local hospital is \$350,000, to be divided as follows: Hospital wing, \$225,000; nurses' home, \$125,000.

* * *

TORONTO, ONT.—At the annual meeting of the Ontario Medical Association, held at the Royal York Hotel during the last week of May, Dr. Ward Woolner of Ayr, Ontario, was elected to the presidency. This is the first time in the half century of history of the Association that a village practitioner has been elected to the office of president.

* * *

TRAIL, B.C.—Tenders for the construction of the Trail-Tadanac Hospital extension, which will cost approximately \$105,000, will be called immediately. The proposed wing will provide 60 additional beds and will include a ward for infectious diseases.

* * *

UNITY, SASK.—Mr. Joseph Needham is the newly appointed superintendent of the Unity Municipal Hospital. Mr. Needham is also a member of the School Trustees Association and a member of the advisory board of the Department of Education. Miss Simpson has been appointed matron of the Unity Hospital.

* * *

VANCOUVER, B.C.—Plans are being prepared for a new fireproof hospital at Shaughnessy Heights for disabled veterans, which will cost in the neighbourhood of \$500,000. Construction will commence in a few months.

* * *

VANCOUVER, B.C.—Large additions and extensions to the St. Paul's Hospital group are to be carried out shortly by the Sisters of Charity of Providence which will render that institution one of the finest in western Canada. Plans entail an expenditure of approximately \$250,000 and building plans are now under way. The new unit is to comprise a fine nurses' home fronting on Comox Street and the building will be five storeys in height and will conform in a general way to the architecture of the present hospital buildings.

Bulletins of Interest to the Hospital Dietitian

Among the interesting exhibits at the Annual Meeting of the Ontario Medical Association held recently in the Royal York Hotel, Toronto, was that of the Kellogg Company of Canada Limited, of London, Ontario. To the delegates were dispensed samples of Kaffee Hag, the caffein-extracted coffee which is especially recommended for patients whose sleep must not be disturbed, together with delicious bran muffins liberally spread with butter. Something of interest to the hospital dietitian has lately been arranged by the Kellogg Company for use in prescribing special diets.

The conscientious hospital dietitian is careful to prescribe diets for the patient leaving the hospital that will aid in complete recovery and continued health. Diet sheets in tablet form with stiff covers have been prepared for their use, containing lists of foods classified under the following headings: Fruits, Grains, Bread, Vegetables, Milk, Eggs, Poultry, Fish, Meats, Game, Soups, Beverages, Appetizers, Condiments, Miscellaneous, Desserts. Foods which the patient may eat can readily be checked off and foods to be avoided deleted. This saves infinite time.

General instructions regarding exercise and living habits are printed on the bottom of each diet sheet. Any special instructions can be written on the reverse side.

Among the other bulletins that may be found useful are the following: Diet Series: Reducing; Diet Series: Constipation; Breakfast Suggestions; Vitamins in Food; Keep Your Own Machinery Fit; Health Hints; Recipe for Kellogg's All-Bran Muffins; Eat Wisely and Keep Well: Rules for Meal Planning; Good Health Rules; Diet Series: Gaining Weight; Diet Series: Food Iron; graphs showing the relative amounts of iron and calcium in different foods.

We would suggest the inclusion of these booklets in the files of hospital dietitians, inasmuch as they contain a fund of information in condensed form as well as graphically depicted. Several of the bulletins have been arranged by the Bureau of Investigation of the American Medical Association.

Coming Events

Ontario Hospital Association Convention, Royal York Hotel, Toronto, October 1st, 2nd, 3rd.

American Hospital Association, New Orleans, October 20-24th.

Catholic Hospital Association, Washington, D.C., September 2-5th.

British Medical Association, Winnipeg, Manitoba, August 30th.

New Brunswick Hospital Association, September 30th, 1930. Place not yet decided upon.

British Columbia Hospital Association, Vancouver, August 19th-22nd.

Western Hospitals Association, at Vancouver, August 19th-22nd.

Ontario United Hospital Aids Association, St. Catharines, September 24th and 25th.

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New Portable Radiographic Unit Available

Of interest to the small hospital which cannot afford expensive X-Ray equipment, or to the individual physician who values the efficacy of the X-Ray for correct diagnosis, is the announcement of the new Keleket Radiographic Unit being sold by Burke Electric & X-Ray Co., Limited, of Toronto. Three types are offered, the Complete Mobile Model, the Portable Model with Mobile Stand and the Portable Model only. The portable model is adaptable to the office of the physician. It is mounted on a mobile base which facilitates its use in general practise. The base is a strongly constructed tripod having a spread of 29 inches triangularly. The large, silent rubber casters permit easy and silent movement to the required position. The portable model is built in two sections, neatly and conveniently arranged, so that it may be taken to the home of the patient or to the room of the patient in the hospital. The new complete radiographic unit which operates on 110 volts A.C. is complete with voltmeter, milliammeter, variable voltage control switch, safety overload circuit breaker, filament regulator, filament transformer, stereoscopic tube stand, main line cable, foot switch, etc.

A complete assortment of accessory equipment is also available which renders the equipment more than usually useful in diagnosis. This accessory equipment includes viewing box, 8 x 10 screens and cassette, 8 x 10 developing hangers, 14 x 17 developing hangers, 5-gallon containers of hypo and developer, steel enamel tanks, dark room lamps, drying racks, films, Coolidge radiator X-Ray tubes, exposure holders, etc.

New Booklet on Food Preservation of Interest to Dietitians

A new book, entitled "Food Preservation in Our Daily Life", has been written for and is published by the Frigidaire Corporation in response to numerous requests from Home Economic teachers and institutional dietitians. It contains such information and material as is required for a thorough understanding of the necessity for mechanical refrigeration and is prepared in such a way that the material makes easy reading. Moreover, it is unusually well illustrated. We are informed that a limited number of copies of this publication are available, and that the company will be pleased to send a copy to readers of the Canadian Hospital who are in charge of institutional kitchens or the planning of patients' meals.

In the preparation of this book valuable assistance has been given by Professor Faith R. Lanman, Department of Home Economics, Ohio State University, Dr. S. C. Prescott, Department of Biology, Massachusetts Institute of Technology, Dr. C. W. Werkman, Department of Bacteriology, Iowa State College and Professor H. E. Drain, Department of Dairying, Ohio State University. As a supplement to this book, the publishers have prepared an attractive book of recipes for use with Frigidaire automatic refrigeration. This book gives valuable information concerning freezing ices, mousses, sherbets, parfaits and other desserts.

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MONTREAL, QUE.—According to an announcement of Premier Taschereau, the Provincial Government has given \$250,000 to the Notre Dame Memorial campaign.

* * *

VANCOUVER, B.C.—Vancouver will play host to 300 delegates or more who will attend the joint Convention of the British Columbia Hospital Association and the Western Hospitals Association from August 19th to 22nd. The latter association covers nine western states, from which a number of eminent medical and hospital men are expected.

* * *

YOUNGSTOWN, SASK.—The long disused agricultural school at Youngstown may be turned into a 21 bed municipal hospital. Owing to the large district which the hospital would serve, it is thought that the institution could operate on a 2 cent per acre taxation instead of the customary 3 cents. The proposal will be voted upon on July 26th.

A New Irradiated Biscuit Containing Vitamins and Mineral Elements

Continued from page 33

pigeon fed on the same diet, but in addition it received 15 per cent. of wheat germ cooked at 300° F. for 20 minutes. After eight weeks on this diet it was apparently normal. Fig. 6 is that of two rats, the smaller one being fed for 4 weeks on a diet deficient in vitamin B₁ and B₂, and the larger rat was fed on the same diet, but in addition received 15 per cent. of the cooked wheat germ. This demonstrates that the heat condition under which the biscuits are cooked does not entirely destroy vitamin B₁ and B₂.

It is the custom in the manufacture of biscuits to add certain alkaline salts as leavening agents. This produces an alkaline reaction which readily destroys vitamin B₁ and B₂ during cooking. To overcome this we have produced a biscuit with a reaction just on the acid side of neutrality through the addition of a small amount of cream of tartar. Further observations are underway to determine the exact concentration of each vitamin in the biscuit.

We would like to emphasize that no attempt should be made to supply all the vitamin requirements with this biscuit. Cod liver oil should still be administered to infants and children, to supply vitamins A and D. The diet should still be constructed around the essential articles of food, namely, milk, eggs, meat, vegetables and fruit. But when the biscuit is used in place of the ordinary biscuit, rusks, zwiebach, toast or bread in addition to simply supplying calories, a food will be given which will assist in the repair and growth of body cells and the maintenance of resistance against disease.

With the realization that our work is only partly completed unless this biscuit is manufactured under the conditions outlined and made available to the public, we have arranged with the McCormick Manufacturing Company to produce this biscuit under our supervision. It is now available under the trade name of McCormick's Sun Wheat Biscuit.*

Continued on next page

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Continued from page 41

SUMMARY

A biscuit has been devised containing whole wheat, wheat germ, milk, butter, yeast, bone meal, iron and copper.

The wheat germ contains a large amount of vitamin E and appreciable amounts of vitamin A, B₁ and B₂. In addition it has been exposed to the rays of a mercury quartz lamp which activates the ergosterol present and thus produces the antirachitic vitamin D. Vitamin A is present in large amounts in the butter, and yeast is a concentrated source of vitamins B₁ and B₂.

The biscuit is baked under conditions which conserve the vitamin content.

Bone meal is added to supply calcium and phosphorus. Five to six biscuits contain the same amount of calcium as one pint of milk, the most important food source of this element.

The iron content is approximately one-half the concentration found in egg yolk, our highest source of iron in food. A trace of copper is also present.

The biscuit should be regarded as belonging to the essential or protective class of foods, and may be used to replace the ordinary biscuit, rusk, zwiebach, toast, or bread which are non-protective foods.

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*The patents for the manufacture of this biscuit are held by the Research Laboratories, and all royalties accruing will be devoted to medical research.

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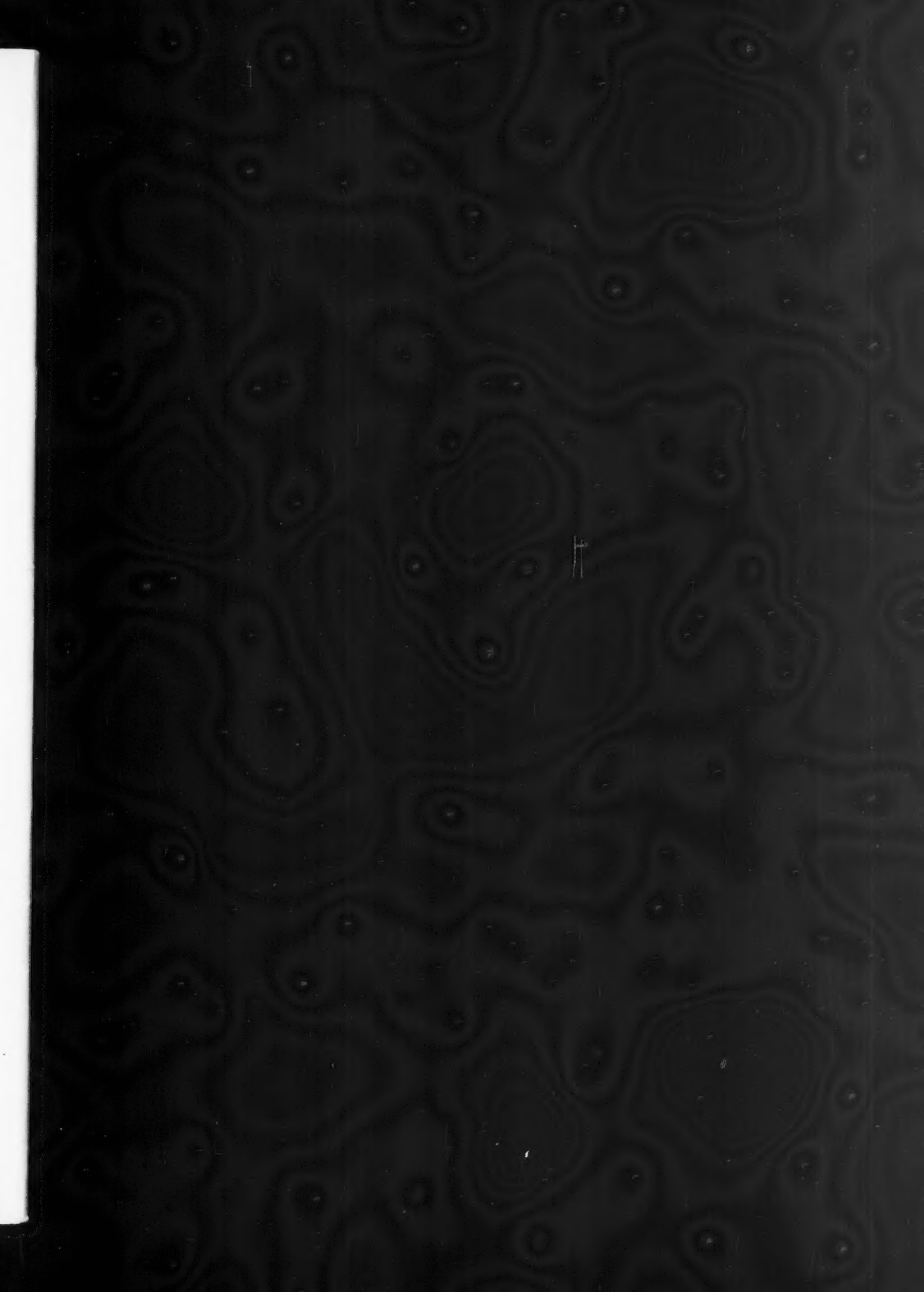
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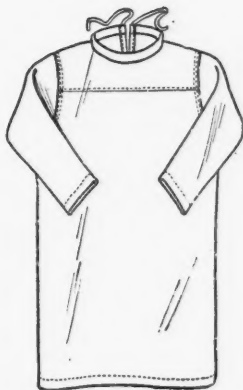
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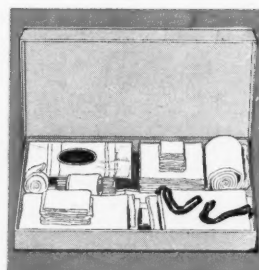
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